

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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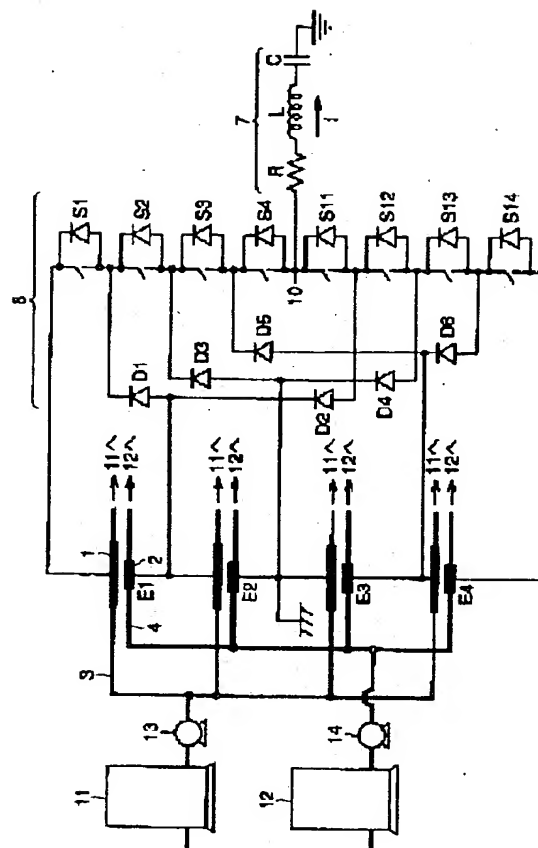
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TITLE : MULTILEVEL INVERTER



**ABSTRACT :** **PROBLEM TO BE SOLVED:** To obtain a high AC power stably with substantially zero loss while suppressing voltage fluctuation by circulation supplying an active substance conduction secondary battery with a positive pole active substance and a negative pole active substance, respectively, from a set of common positive pole active substance conduction path and a negative pole active substance conduction path.

**SOLUTION:** The multilevel inverter comprises redox flow secondary batteries E1, E2, E3, E4 connected in series to constitute a multilevel terminal voltage, and an inverter section 8 controlling build up of the potentials of multilevel terminals to constitute an AC power. The redox flow secondary batteries are circulation supplied with positive pole liquid and negative pole liquid, respectively, through a positive pole liquid channel 3 including a positive pole liquid tank 11 and a positive pole liquid pump 13 and a negative pole liquid channel 4 including a negative pole liquid tank 12 and a negative pole liquid pump 14. Since charge/discharge takes place using active substances having arranged compositional concentration, the multilevel inverter can sustain a constant voltage with high accuracy.

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